



## ICT application in FMCG businesses in post-COVID-19 economy in Vietnam

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### Abstract

This article analyzes the current status of Vietnam's economy after COVID 19 and the application of ICT in the FMCG industry in Vietnam in the post-COVID 19 period. We will also discuss about the impacts of ICT on businesses, challenges and the general difficulties of the economy in the pandemic situation. The article presents data and analyzes the objective and subjective causes of pandemic to businesses, thereby summarizing solutions and recommendations for improvement.

**Keywords:** ICT, post-COVID-19 economy, FMCG industry, Vietnam

### 1. Introduction

Vietnam's economy was severely affected in most industries and is expected to grow more slowly due to the re-emergence of the COVID-19, the pandemic disrupted labor resources, reduced industrial output and disrupted agricultural value chains. The COVID-19 pandemic and prolonged lockdowns have weakened consumption and investment, limiting Vietnam's growth prospects, said Andrew Jeffries, ADB Country Director for Vietnam. Vietnam's economy will recover if the COVID-19 pandemic is controlled by the end of 2021 and by the second quarter of 2022, 70% of the country's population will be vaccinated. However, the short-term growth outlook is fraught with challenges. The main risk is a prolonged pandemic, especially if vaccination rates across the country do not increase significantly. Growth also depends on timely government delivery of essential items, such as food and cash, to vulnerable populations affected by the pandemic.

In 2021, experts continue to say that this is still a difficult year for the business community in Vietnam and the world. One of the things that worries many manufacturers is the change in consumer behavior of billions of people around the world, including Vietnam. Business has been sluggish since the beginning of the year, that due to difficulties, consumers spend very little, mainly focusing on essential goods for everyday life. Revenue from many industries such as household appliances and beverages all decreased. In a report from Nielsen, the fast-moving consumer goods industry was hit hard by the COVID-19 epidemic and is still struggling to recover. Accordingly, when referring to the post-COVID-19 life model, Nielsen's global Intelligence team pointed out what negatively affected by economy, finance and unemployment, livelihood and the income of many consumers has been seriously reduced. Consumers will re-prioritize what they can afford to live on.

The Covid-19 pandemic since the beginning of 2020 has led to disruptions in supply chains and trade on a global scale, thereby requiring all traditional business and management models to change radically and adaptively. In fact, traditional trade promotion activities support output promotion for products such as fairs, seminars, conferences to connect supply and demand, trade transactions abroad. Recently, it has been canceled or postponed both domestically and in most major export markets.

Faced with this situation, the Trade Promotion Department (Ministry of Industry and Trade) has urgently researched, implemented and adjusted many trade promotion activities in accordance with the actual situation, through coordination with partners in the industry to conduct domestic and international activities in a new manner, timely support enterprises. Promoting the application of ICT and digital transformation in trade promotion has initially brought into play its effectiveness, helping businesses save costs as well as overcome difficulties in terms of distance, geography and time, step by step support enterprises to promote growth in production and business, contributing to economic growth.

The objective of this report is to synthesize, analyze, comment and propose solutions for the post-Covid FMCG industry outlined in the report.

Synthesize and clearly analyze the effects of the Covid-19 epidemic on FMCG industry and at the same time offer specific solutions to restore the FMCG industry as well as the whole economy of Vietnam.

Giving specific numbers, examples and examples so that everyone can update the situation as well as the urgency of the topic is the goal that the report wants to aim for, through which there are some solutions with high hopes. hope to soon recover the fast-moving consumer goods industry in particular and Vietnam's economy in general.

## 2. Theoretical Review

### 2.1 Trade and service sector of the Vietnamese economy:

In Vietnam, before the Doi Moi period, trade was a less developed industry due to the implementation of the administrative management mechanism of orders and goods not be exchanged on the market but distributed according to the subsidy and service regime, therefore cannot develop. During this period, our state prioritized development of heavy industry, so services also account for a very small proportion in the economic structure. Types of services in general and trade in services in particular are only really developed after the state implements the economic opening policy.

Although Vietnam's services are still not as developed as in some countries in the region and the world, they have also contributed significantly to the economic development. The services are increasingly contributing to GDP. The proportion of services is currently stable around 40%. Services, although accounting for a large proportion, have tended to decrease in recent years. If in 1995, the proportion of services in GDP was about 42-43%, in 2000, the expenditure was about 38.73% and in 2003 it was 37.99%. In 2005, the proportion of services in our country was about 38.08% while industry was 41.03%, agriculture, forestry and fishery decreased to only 20.09%. The share of Vietnam's service industries in GDP is lower than that of the world (Since the mid-1990s, the proportion of services in world trade has been 60% of global production and employment, 80 percent for the US alone) and developing countries in the region such as Thailand, Malaysia, and the Philippines. According to the plan, by 2010, the proportion of services in GDP will account for 43-45%, which means that the growth rate must reach 9-10%/year and be higher than the GDP growth rate (about 8 to 8.5%). In 2004, the growth rate of services was 7.47% and lower than the overall GDP growth rate of 7.69%. However, by 2005, the service sector had a much higher growth rate of 8.5%. In this region, industries have a large proportion and belong to the field of business

services such as commerce, hotels, restaurants, transportation, post office, tourism, finance, banking, and insurance all had higher growth rates than the growth of each industry in the previous year. Commerce this year increased by 8.3% (in 2004 it increased by 7.8%); Hotels and restaurants increased by 17% (in 2004 increased by 8.1%); Transport, post, tourism increased by 9.6% (in 2004 increased by 8.1%).

Service import and export value in 2005 was estimated at \$9.3 billion, up 6%, of which service exports were \$4.26 billion, up 7.2%, service imports were \$5.04 billion, 5% increase. Currently, the service industry attracts a lot of investment of the entire economy (72%), while investment in the manufacturing industry accounts for 20% of the investment structure of the whole society. However, the rate of foreign investment in the service industry is still low. The structure of investment in services in our country is also changing, the proportion of investment in industries such as tourism, finance and banking is increasing. In 2003 the service industries with the largest proportion in the economic structure of Vietnam included commercial services (distribution, repair, etc.) accounting for 14.5% of GDP, construction services (67), other services such as finance, telecommunications have a lower proportion of about 2-3%. Service is also an industry that creates many jobs for laborers in our country. For a country where 80% of the population still depends on agricultural production like ours, where agriculture is an industry that is highly dependent on weather and unstable prices, the service industry plays an important role important. Our country currently has about 38 million employees, of which 24.1% are in the service industry, 65.3% are in the agricultural sector, and 10% are in the industry. Therefore, service development is inevitable. However, Vietnam's services still have some limitations: services are a new and small field, and trade in services is still very limited. Before the service innovation period, the service was ignored and until now, there have been heavy consequences in people's awareness and even in the policy mechanism and legal system related to production and business activities.

### Vietnam's development trend: Going into service

In terms of structure in GDP, the proportion of trade and service sector is increasing continuously and stably. Considering international trends, going into trade and services is also a popular trend nowadays. According to our survey, 81 developing countries are all countries going into trade and services. In particular, the countries with the fastest growth rates are the ones going into services, not going into industry. That said, trade and services is an important economic sector in any modern economy, because it is not only the industry that creates the final products, but also the central input. of other industries. UNCTAD data in 2017 show that all developed countries have a service share accounting for 61-76% of the total GDP in the period 1980 - 2015.

In Vietnam, the per capita added value of the service sector has always increased steadily. Meanwhile, in the early stages of urbanization, this value of the agricultural sector tends to decrease. When urbanization is strong, labor out of the agricultural sector increases, so the per capita added value of this area also increases. That means, the labor productivity of the agricultural sector increases, because more workers leave the agricultural sector, fewer workers stay.

For the processing and manufacturing industry, in the early

stages, this value tends to increase quite rapidly; but now, the rate of increase is slow and is on a decreasing trend. Especially, the proportion of processing and manufacturing industry in GDP also tends to decrease compared to 20 years ago (about 17% before, about 14.5%).

That shows, trade and service is a big trend of the world, and also a development trend of Vietnam. It can be said that it is the long-term driving force of Vietnam's economic sector, not the processing and manufacturing industry. The processing and manufacturing industry is also a driving force, but it is a short- and medium-term driver, not a long-term one.

It is quite surprising that the added value of the processing and manufacturing industry per worker tends to decrease because most of the processing and manufacturing industries are in the hands of foreign enterprises. especially the manufacturing industry. That is, the manufacturing industry is being controlled by foreign countries, turning us into factories and main consumption market.

## **2.2. Impact of the Covid-19 pandemic on service trade in Vietnam:**

Along with the global economic boom and following the results achieved in 2020 in the first months of 2021, our country's macro-economy continues to be stable and starts to prosper. However, the wave of Covid-19 epidemic that broke out at the end of April with a new strain that spread rapidly, was dangerous and complicated in many localities, especially in key economic provinces and cities. such as: Hanoi, Bac Ninh, Bac Giang, Da Nang, Ho Chi Minh City, Binh Duong, Dong Nai, Long An, Can Tho have seriously affected people's life, health, life and activities production and business activities. On the other hand, global trade showed signs of recovery but tended to slow down, prices of many items increased sharply compared to 2020, inflation increased but in general remained under control worldwide. In addition, the pandemic has caused bottlenecks in the global value chain, causing the price of production materials to increase, which is a significant challenge for production and business activities of countries. The economy of our country was heavily affected when GDP in the third quarter of 2021 decreased by 6.17%, which is the deepest drop ever and in 9 months only increased by 1.42% compared to the same period last year. In which, the service sector is most affected in the economic sectors.

In the third quarter of this year, the added value of the service sector decreased by 9.28% over the same period last year, much higher than the decrease of 6.17% of the whole economy and the decrease of 5.02% of the sector. Industry and construction. During the 9 months of this year, the Covid-19 epidemic lasted for a long time, many key economic localities had to implement social distancing to prevent the epidemic, which has seriously affected the economy. GDP in the first nine months of this year only increased by 1.42%, in which, the service sector was hardest hit when it was the only sector with added value down 0.69%, reducing 22.05% to the level of GDP. general growth of the economy.

The negative growth in the first nine months of 2021 of a number of service industries accounting for a large proportion has reduced the overall growth of the service sector and the whole economy, such as: The wholesale and retail industry decreased by 3.1% compared to that of the whole economy. in the same period last year. Especially, the FMCG industry decreased by 0.8%; the transportation and warehousing industry decreased by 7.79%, reducing 0.47

percentage points; accommodation and catering services decreased by 23.18%, down 0.57 percentage points. Some industries had growth rates compared to the same period last year, contributing to minimizing the decline of the service industry such as: The health sector and social assistance activities achieved the highest growth rate with an increase of 21.15%, contributed 0.26 percentage points; financial, banking and insurance activities increased by 8.37%, contributing 0.45 percentage points; the information and communication sector increased by 5.24%, contributing 0.32 percentage points.

The business sector is the main driving force, contributing greatly to economic growth, the prolonged Covid-19 epidemic has caused many businesses to face the risk of bankruptcy. Domestic and international supply chains were disrupted by successive rounds of distancing, especially businesses in the service sector when the number of enterprises withdrawing from the market was 41.6 thousand enterprises (accounting for 72% of the total number of enterprises), the total number of enterprises withdrawing from the market), an increase of 12.7% over the same period last year. The wholesale, retail, and repair of automobiles and motorbikes had 21.4 thousand enterprises withdrawing from the market. market; science, technology, consulting and design services have 3.7 thousand enterprises; employment services, tourism, rental of machinery and equipment, utensils and other supporting services and the accommodation and food service industry together with 3.4 thousand enterprises; The transportation and warehousing industry has 3.1 thousand enterprises.

The decline in confidence in the market made the number of newly registered enterprises seriously decrease both in quantity and in registered capital. In the first nine months of 2021, the total number of newly established enterprises reached 85.5 thousand enterprises, down 13.6% over the same period last year, of which the service sector had 60.9 thousand enterprises (accounting for 71 3% of the total number of newly established enterprises), down 9.5%. The average registered capital of a newly established enterprise reached VND 14 billion, down 3.1%. In addition, the number of enterprises returning to operation in the service sector was 22.6 thousand enterprises (accounting for 69.8% of the total number of enterprises returning to operation), a decrease of 6.3% over the same period last year.

## **Impact of the Covid-19 epidemic on some service activities**

In the first nine months of 2021, the total retail sales of consumer goods and services decreased by 7.1% over the same period last year (the same period in 2020 decreased by 0.7%). In which, the fast-moving consumer goods industry is the only bright spot when it only increased slightly compared to the same period in 2020 (increasing by 10%), partly due to the number of people who ordered specials in the months to hoard or meet demand. Daily demand is high and sometimes skyrockets in the first months of the gap. Meanwhile, travel and tourism suffered the most with a decrease of 64%, a decrease in provinces/cities: Quang Ninh down 31.5%; Da Nang down 42%; Can Tho down 45.3%; Hanoi down 55.4%; Hai Phong down 55.7%; Ho Chi Minh City down 56.2%; Thua Thien - Hue down 63.1%; Binh Duong decreased by 67.8%; Quang Nam down 82.4%; Khanh Hoa fell 89.5%. Followed by the decline of accommodation and food services with a decrease of 22.1%, mainly due to a decrease in Quang



Ninh down by 12.6%, Can Tho down by 14.9%, Da Nang with a decrease of 17.5 %, Dong Nai down 20.8%, Hanoi down 24.9%, Binh Duong down 26.4%, Ho Chi Minh City down 30.5%, Nghe An down 34.1%. Retail sales decreased by 3.4%. In terms of industry, in the retail sales of goods in the first nine months of 2021, there is a 5% increase in food and food products; means of transport decreased by 6.4%; garment decreased by 9.6%; household appliances, tools and equipment reduced by 10%; cultural and educational products decreased by 10.5%. Retail sales of goods in 9 months of 2021 compared to the same period last year of some localities: Hanoi decreased by 4.4%; Can Tho decreased by 5.4%; Ho Chi Minh City decreased by 22.1%; Da Nang increased by 4.4%; Hai Phong increased by 9.6%. This has a significant impact on domestic enterprises, after a year of living with the epidemic (2020), businesses have also found ways to bring products to consumers. So in general, in 2021, the FMCG industry has improved more than the same period last year, this is a must for businesses to do in order to maintain production and meet the needs of the people. Passenger transport in the first nine months of 2021 decreased by 23.8% compared to the same period last year, passenger traffic decreased by 30.9% and freight transportation decreased by 5.6%, freight turnover decreased by 0.3%. International visitors to our country in the third quarter of 2021 reached 26.3 thousand arrivals, down 40.3% over the same period last year because Vietnam continued to implement measures to prevent and control the Covid-19 epidemic, which has not yet opened. As an international tourist gate, the number of visitors is mainly foreign experts and technical workers working in projects in Vietnam. In first nine months of 2021, international visitors to our country reached 114.5 thousand arrivals, down 97% compared to the same period last year.

### 2.3. Impact of ICT on service trade activities in the post-Covid-19 pandemic:

According to experts, the industrial revolution 4.0 has shown a great step forward in improving productivity by transforming operating methods and the relationship between factors of the production process. At the same time, a new economic form was born, which is the sharing economy with as wide and revolutionary influence as some online ride-hailing platforms or workspaces, through the form of business and business and between business and customers.

In addition, the industrial revolution 4.0 has created many breakthroughs in new technologies in fields such as artificial intelligence production, robot manufacturing, internet network development, 3D printing technology, nanotechnology, biotechnology, materials science, energy storage and informatics.

Accordingly, new technologies will be born that will link the fields of physics, mechanics, electronics and biology, forming new professions, especially those related to interaction between humans and machines.

In Germany, it is estimated that by 2025, the industrial revolution 4.0 will create about 350,000 jobs, an increase of 5% compared to the workforce of 7 million people in 23 manufacturing industries currently participating in the study. The spread of robotics and computer technology will reduce about 610,000 assembly and manufacturing jobs, but there will be 960,000 additional jobs. The fields of information technology, analysis, research and development require an additional 210,000 highly skilled personnel, all of which are

new sources of employment opportunities.

Not only that, the industrial revolution 4.0 will also create new professions that appear for the first time, such as electronic data forensic analysts and carbon emissions managers, smart hardware engineers, transportation workers operating and maintaining industrial vision systems, integrated circuit engineer, online sales consultant, online instructor, along with a rather special profession as a calorie nutritionist and self-care assessor.

In addition, there are many other new professions that have also been recognized and have made certain contributions to the community and society. According to the "Report on New Types of Service Industry and the Number of New Practitioners in 2020" of the Mission Institute (USA), 53.9% of people choose a new career because of income and 50.4% Choose a new career out of passion. In particular, the common perception of many people is that they want to take advantage of opportunities from a new career to rapidly develop their professional capacity, increase their income and the ability to meet like-minded partners.

For the FMCG industry, the impact of ICT is huge. In the face of the COVID-19 pandemic, during the months of isolation, all businesses must accept change and adapt to survive. The application of ICT in production, when the 3 on-site directive was issued, some businesses have turned to apply information technology to the apparatus, this is an opportunity for businesses to change and improve their system and of course not all businesses can adapt. But without applying and adapting ICT in an era where all trading activities take place through a smartphone, it is difficult for enterprises to avoid production halt and possibly bankruptcy.

## 3. Research Methods

### 3.1. Data sources

The Covid-19 epidemic continued to develop complicatedly across the country, negatively affecting commercial and service activities in many southern provinces and cities, and Hanoi implemented social distancing in accordance with the extended directives. To find out the right data sources, the co-authors have access to find out the most complete information to make relevant reports. And here are the found sites:

Electronic newspaper: <https://dangcongsan.vn/>

Ministry of Finance: <https://vst.mof.gov.vn/>

Vietnam Ministry of Industry and Trade: <https://moit.gov.vn/>

State Bank: <https://www.agribank.com.vn/>

### 3.2. Collection method

During the research process, collecting data takes a lot of time, especially with the current situation, both cost and effort must be spent. However, this is an extremely important part, laying the foundation for the research and analysis to go smoothly.

#### Secondary data collection method

Primary data is data that is not yet available, collected for the first time, collected by the researchers. In fact, when the secondary data does not meet the research requirements, or the suitable secondary data cannot be found, the researchers will have to conduct primary data collection. The method of collecting relevant secondary data requires search work, consisting of two interconnected stages:

+ Step 1: Determine if the type of data you need is present in the form of secondary data.

+ Step 2: Locate the exact data you need.

## Primary data collection method

### Observation method

Observation is a method of data collection by recording control of FMCG industries during the human covid 19 epidemic. This data collection method is often used in conjunction with other methods to cross-check the accuracy of the collected data. Can be divided:

- + Direct observation and indirect observation: Direct observation is the practice of observing what is currently happening.
- + Indirect observation is the conduct of observing the effects of behavior camouflage observation and overt observation.
- + Disguised observation means that the subject being studied has no idea they are being observed.

### Method of survey by letter (interview)

#### Method content

This method of data collection is done through the submission of prepared questionnaires.

### Telephone interview method

When conducting the data collection method, the survey will conduct a survey of the respondents by phone according to a prepared questionnaire. Applying research to many subjects, people with income (because they all have phones). It is recommended to use a combination of telephone interviews with other data collection methods to further increase the effectiveness of the method.

### Personal interview method

When implementing the data collection method through direct personal interview, direct visit to trade or convenience store, respondents were interviewed according to a prepared questionnaire. Applied when the research phenomenon is complex, it is necessary to collect a lot of data; when you want to poll the audience through short and quick-answer questions,

## 3.3. Research Process

Step 1: Define the problem and objectives

Step 2: Develop a research plan

Step 3: Collect information

Step 4: Analyze information data

Step 5: Presenting the research results

Step 6: Make a decision, complete the research

## 4. Research results and discussion

### 4.2 The competitiveness of the FMCG industry compared to other sectors of the Vietnamese economy

The slow, unexpected growth in the fast-moving consumer goods (FMCG) industry in Vietnam is putting competitive pressure on businesses related to this industry to keep market share. The trend of multi-channel retailing and grasping purchasing factors forces FMCG manufacturers to make many changes, focusing on launching new products. FMCG businesses will have to continue to pay attention to the newly released survey data of market research company Kantar Worldpanel Vietnam showing that the FMCG market is growing more slowly in urban areas (mainly in four big cities: Hanoi, Ho Chi Minh City, Da Nang, Can Tho) and rural areas. Even maintaining the 5% growth rate of the FMCG industry for the whole year of 2018 is also a big challenge when Vietnamese people are reducing their spending on

buying FMCG and being "choosy" about emerging needs in this commodity.

Kantar Worldpanel figures show that last year there were a total of 5,796 new products in this category. On average, 16 new products appear on the market every day, while this number was 12 three years ago (2014) and 10 five years ago (2012). Last June, the market research company Nielsen Vietnam also believes that the optimistic indicators of economic growth in the first quarter of 2018 still do not boost sales of FMCG products. It is that contradiction that reflects many other perspectives and open opportunities that manufacturers should seize now. According to Ms. Nguyen Huong Quynh, General Director of Nielsen Vietnam, the positive sentiment of consumers in Vietnam did not lead to strong growth in FMCG revenue, with growth in the first quarter. 2018 only reached 1.8%. This growth rate is slower than expected and reflects the volatility of the FMCG industry in Vietnam, possibly due to changes in consumer behavior. Meanwhile, the 2018 consumer survey results of the Association of High Quality Vietnamese Products Enterprises stated that the trend of prioritizing safe products will remain a hot trend in the picture of food and beverage consumption and this year's agricultural products. The survey results indicate four food safety risks that consumers are currently most concerned about for the FMCG industry: the use of banned substances, raw materials, unhygienic production processes and chemical residues. hazardous substances in the product. These risks account for more than 62% of consumers' concerns when choosing to buy food products, fresh agricultural products, confectionery and beverages. This is a rate that far exceeds the remaining concerns such as fake goods or arbitrarily changing the expiry date.

Consumers tend to be very shy in choosing products originating from countries with many scandalous food safety and hygiene scandals (the rate of choosing to buy Chinese products accounts for only 0.6%, while consumers choose to buy products from China products originating from Thailand, Japan, etc. account for 10%). Among the top 5 factors affecting Vietnamese consumers' decisions made by Nielsen, two factors choosing to buy healthy products or choosing to buy organic or natural products are given the highest priority by consumers (77 %) than other factors.

### 4.3 Actual situation of impact of the Covid-19 pandemic on Vietnam's FMCG industry

The most obvious initial impact is expected economic growth to slow down. Vietnam's economy shows optimistic prospects in 2019 with GDP exceeding the set target of 6.8%, well-controlled CPI along with double-digit growth from retail sales of consumer goods. However, with the unexpected appearance of the Covid-19 epidemic from the end of January until now, the lives of consumers have been affected with the slowing growth of the economy and the inflation rate being moderated. highest in the past 7 years. Besides, the fast-moving consumer goods (FMCG) industry grew slowly. Despite recording impressive numbers in 2019, FMCG growth in the first two months of 2020 slowed to 5.2%. Main categories such as milk and dairy products, packaged foods, and personal care products continued to make large contributions to the market's growth with an increase of 8.5%, respectively; 10.8% and 14.5%. Meanwhile, beverages decreased significantly (-6.8%), partly due to restrictions on travel, sightseeing tours, gatherings of

friends as well as decreased demand for parties and priority given to health care during the pandemic.

In addition, the Covid-19 epidemic also had a strong impact on inventory spending during the epidemic season. With anxiety and confusion during the outbreak period, consumers began to actively increase shopping and stockpiling FMCG goods. Beverage is the industry that is most affected during the epidemic season while other categories have double-digit growth. Specifically, beverage consumption decreased by 14.1%; milk and dairy products by 10.3%; packaged food increased by 26.2%; personal care products by 29%; home care products increased 11.4%.

#### 4.4. Current situation of ICT in mitigating consequences and finding competitive advantages of the Covid pandemic for the FMCG industry

The COVID-19 epidemic is believed to be the driving force behind digitalization in Vietnam and its impact on consumer behavior, leading to increased demand for ICT products. This is beneficial for ICT product distributors.

#### Digital Trends

Google's e-Economy SEA 2020 report indicates that, during the COVID-19 pandemic, consumers are turning to digital services. Of the total number of digital service users, new users account for 41% in Vietnam, higher than the average in Southeast Asia.

In addition, 94% of these new users plan to continue using those services, even after the pandemic. Before the COVID-19 epidemic appeared, Vietnamese people used to spend 3.1 hours a day accessing them. Internet for personal use. During the period of widespread application of social distancing, this number skyrocketed to 4.2 hours/day. This number is expected to remain at a high level of 3.5 hours/day post-pandemic.

The Internet economy in Southeast Asia has grown 5% in 2020 to \$105 billion despite difficulties caused by COVID-19. Google estimates that Southeast Asia's internet economy could nearly triple to \$309 billion by 2025, equivalent to a CAGR (compound annual growth rate) for the period 2020-2025 of 24 %, driven by a strong increase in e-commerce with a CAGR of 23%, online media with a CAGR of 15%, online travel and digital consumption of transport as well as food. products also achieved CAGR at 33% and 30% respectively. Vietnam is among the countries with the fastest growing digital economy in Southeast Asia. In 2025, it is expected that the digital economy of the Philippines will have a CAGR of 30%, Vietnam 29%, Thailand 25%, Indonesia 23%, Malaysia and Singapore both reaching 21%. The strong growth prospects of the digital economy show that changes in consumer behavior such as spending more time online can be sustained into the future. Laptop sales in Vietnam have increased over the past 3 years, driven by the vibrant business environment before COVID-19; increasing digitalization efforts and changes in consumer behavior, such as the shift to work and study online. Normally, the third quarter of every year is the peak season for laptops in Vietnam, mainly due to the back-to-school season. Given the current COVID-19 situation across the country, students are required to study online, which is expected to last until the end of the first semester of this year. The demand for laptops is accordingly exploding.

#### 5. Conclusion and recommendations

The development of the Internet and the fluctuations in the beginning of 2020. When the Covid-19 epidemic suddenly "landed" has disturbed life. This has caused our consumption behavior to change as customers switch from shopping in-store to online shopping. Besides opportunities, after the post-Covid era, Vietnamese businesses really face a lot of challenges when the Covid epidemic has not completely ended, the worry of businesses is the company's finance and personnel, especially service marketing after Covid-19 has changed. From the assessment of the challenges for service marketing, the research has also provided a number of solutions that can help businesses consult and give orientations for businesses in this period.

Policy will continue to play an important role in helping businesses adapt to new business models. For example, trade conflicts can be mitigated through sweeping trade agreements that cover not only trade but also complementary policy areas, such as protection of intellectual property rights and the environment such as CPTPP and EVFTA in Vietnam. Supply networks can be expanded and enhanced through policies to promote business-to-business (B2B) digital connectivity, skills and capacity building, and infrastructure. auxiliary logistics. In the future, a coordinated approach between government and the private sector is likely to become more important. Such coordination can help developing countries promote technology adoption and diffusion, build the capacity of domestic firms, and implement new strategies to attract foreign direct investment (FDI), especially from businesses that add value to the domestic supply chain.

#### 6. References

1. World bank ( <http://data.worldbank.org/> )
2. The Asea Regional Integration Center (ARIC)- ( <http://aric.adb.org/> )
3. State Bank ( <http://sbv.gov.vn> )
4. Ministry of Finance ( <http://www.mof.gov.vn/> )
5. ASEAN data and statistics portal (<https://aecvcci.vn/>)
6. Ministry of Labor, Industry, Trade and Social Affairs ( <http://www.molisa.gov.vn/> )
7. Ministry of Industry and Trade ( <http://tttm.vecita.gov.vn/> )
8. <https://tailieu.vn/doc/bai-giang-thi-truong-tieu-dung-nhanh-091823.html>
9. <https://dangcongsan.vn/Kinh-te/nganh-dich-vu-an-uong-va-huong-di-trong-giai-doan-gian-cach-xa-hoi-591297.html>
10. <http://thitruongtaichinhhtiente.vn/dich-covid-19-tac-dong-nhu-the-nao-den-thu-nhap-cua-nganh-ngan-hang-nam-2020-27330.html>
11. <https://ncov.vnanet.vn/tin-tuc/dich-covid-19-thoi-quen-tieu-dung-cua-nguoi-dan-thay-doi-sau-gian-cach-xa-hoi/f0962a3d-fa05-4a39-9232-1091062f7f02>
12. Tien NH. Customer Behavior in Pre-purchase Stage of online Shopping. International MICA Conference in Danang City, Vietnam, 2018.
13. Tien NH. Green Entrepreneurship Understanding in Vietnam. International Journal of Entrepreneurship. 2020; 24(2).
14. Tien NH. Human Resource Management, VHU Publisher, Ho Chi Minh City, 2020.
15. Duc LDM, Thuy Yen, NTH, Tien NH. Corporate Social Responsibility and Corporate Financial Performance Case of Listed Vietnamese Companies, Zeszyty



- Naukowe Politechniki Częstochowskiej. Zarządzanie. 2018; 32:251-265.
16. Tien NH, Anh DBH, Ngoc NM, Nhi DTY. Sustainable Social Entrepreneurship in Vietnam, *International Journal of Entrepreneurship*. 2019; 23(3):1-12.
  17. Tien NH, Thao VT T, Hung Anh, DB. Sustainability issues in social model of corporate social responsibility. Theoretical analysis and practical implications, *Journal of Advanced Research in Management*. 2019; 19:1.
  18. Tien NH. Green Entrepreneurship Understanding in Vietnam. *International Journal of Entrepreneurship*. 2020; 24(2).
  19. Tien NH, MinhHTT, Ngoc NM, Nhan VK. Family business in Vietnam and in Poland: Review of characteristics and trend of development, *Journal of Southwest Jiaotong University*. 2020; 54(6):1-19.
  20. Tien NH. Relationship between Working Environment and Labor Efficiency. Comparative Analysis between State Owned and Foreign Enterprises in Vietnam. Proceedings of University Scientific Conference on: "The Role of Scientific Workers in Socio-economic Development of Quang Ngai Province and South Central Vietnam ". Pham Van Dong University. June 2019, Quang Ngai, Vietnam, 2019.
  21. Tien NH. The role of human resource management in international business strategies of foreign enterprises in Vietnam. (preprint), 2020.
  22. Tien NH, Vinh PT, Thuc TD, Chi DTP. Working Environment and Labor Efficiency of State Owned Enterprises and Foreign Corporations in Vietnam, *International Journal of Financial Management and Economics*. 2019; 2(2):64-67.
  23. Tien NH, Minh HTT, Ngoc NM, Nhan VK. Family business in Vietnam and in Poland: Review of characteristics and trend of development, *Journal of Southwest Jiaotong University*. 2020; 54(6):1-19.
  24. Tien NH, Thao VTT, Hung Anh DB. Sustainability issues in social model of corporate social responsibility. Theoretical analysis and practical implications, *Journal of Advanced Research in Management*, 2019, 19.
  25. Tien NH. Customer service culture at VIB bank in Vietnam, *Himalayan Journal of Economics and Business Management*. 2021; 2(4):44-51.
  26. Tien NH. Customer service culture at Techcombank in Vietnam, *Himalayan Journal of Economics and Business Management*. 2021; 2(4), 44-51.
  27. Tien NH. The Development Process of CRM System at VinMart in Vietnam, *International Journal of Research and Growth Evaluation*, 2021.
  28. Bui Quang Tam. The History of Development of CRM System at AEON Vietnam, *International Journal of Research and Growth Evaluation*. 2021; 2(4):737-743.
  29. Tien NH. Customer Care and Customer Relationship Maintenance at Ministop, FamilyMart and CoopSmile in Vietnam, *International Journal of Research and Growth Evaluation*. 2021; 2(4).
  30. Tien NH. The Formation and Development of CRM System at Thien Hoa Electronics Supermarket in Vietnam, *International Journal of Research and Growth Evaluation*. 2021; 2(4).
  31. Tien NH. The Process of CRM System Implementation at Dien May Xanh in Vietnam, *International Journal of Research and Growth Evaluation*. 2021; 2(4).
  32. Tien NH. Comparative Analysis of Business Environment in Binh Duong, Dong Nai and Ba Ria Vung Tau of Vietnam Using EFE Matrix, *International Journal of Research and Growth Evaluation*. 2021; 2(4).
  33. Tien NH. Customization and Standardization of the Business Strategy of Foreign Enterprises in Vietnam – the McDonald's Case and the Food Sector, *International Journal of Research and Growth Evaluation*. 2019; 1(2):44-50.
  34. Tien NH. Innovation Strategy of Korean Enterprises and Development of High Quality Human Resource – Experiences for Vietnamese Businesses. Proceedings of 1st International Scientific Conference Southeast Vietnam Outlook" on "Developing High Quality Human Resource, Asian Experience for Ho Chi Minh City Metropolitan Area in Vietnam, 2018.
  35. LP Dana, NH Tien, RJS Jose, NV Dat, PM Duc. Analysis of McDonalds' Entry Strategy in Vietnam Market, *International Journal of Advanced Research and Development*. 2020; 5(3):23-29.
  36. NH Tien, TTH Thuan. Analysis of Strategic Risk of Domestic and Foreign Real Estate Enterprises Operating in Vietnam's Market, *International Journal of Commerce and Management Research*. 2019; 5(5):36-43.
  37. VTT THAO, NH TIEN, DBH ANH. Sustainability Issues in Social Model of Coporate Social Responsibility Theoretical Analysis and Practical Implication, *Journal of Advanced Research in Management*. 2019; 10(1):17-29.
  38. Nogalski B, Tien NH. Developing High Quality Human Resource to Benefit from CP-TPP and IR 4.0, *International Journal of Research in Management*. 2019; 1(2):4-6.
  39. Pham Thi Diem, Phan Minh Duc, Ho Tien Dung, Nguyen Van Dat, Bui Quang Tam, Vo Kim Nhan. The Strategic Customer Relationship Management at CoopMart in Vietnam. *International journal multidisciplinary research and growth evaluation*. 2021; 2(4):794-801.
  40. Phan Phung Phu, Dang Thi Phuong Chi. The Role of International Marketing in International Business Strategy. *International journal of research in marketing management and sales*. 2019; 1(2):134-138.
  41. Phung The Vinh, Tran Duy Thuc. Global Strategic Risk Analysis of High-tech Businesses in the Era of Industrial Revolution 4.0. *International journal of multidisciplinary research and development*. 2019; 6(10):28-32.
  42. Rewel Jiminez Santural Jose, Nguyen Phuong Mai, Le Doan Minh Duc, Nguyen Vuong Thanh Long. Analysis of MegaMarket's Market Penetration Strategy in Vietnam FMCG Industry. *International journal of educational research and development*. 2020; 2(2):5-8.
  43. Rewel Jiminez Santural Jose, Ha Van Dung, Bui Xuan Bien, Nguyen Thi Hoang Oanh, Nguyen Thanh Vu. Analysis of AEON's Market Penetration Strategy in Vietnam FMCG Industry. *International journal of advanced educational research*. 2020; 5(4):1-5.
  44. Rewel Jiminez Santural Jose, Nguyen Phuong Mai, Bui Van Thoi, Than Van Hai. Analysis of Starbucks' Entry Strategy in Vietnam Market. *International journal of multidisciplinary education and research*. 2020; 5(3) 44-48.
  45. Rewel Jiminez Santural Jose, Nguyen Phuong Mai, Ho Tien Dung, Nguyen Thi Hoang Oanh, Nguyen Huynh Phuoc. Digital Marketing Strategy of GUMAC and

- HNOSS in Vietnam Fashion Market. International journal of multidisciplinary education and research. 2020; 5(4):1-5.
46. Rewel Jiminez Santural Jose, Nguyen Phuong Mai, Tran Thanh Tung, Nguyen Khanh Cuong, Nguyen Thi Hoang Oanh. Comparative Analysis of Business Strategy of VinMart and Family Mart Convenience Stores in Vietnam. International journal of multidisciplinary research and development. 2020; 7(7):28-33.
  47. Rewel Jiminez Santural Jose, Nguyen Minh Ngoc, Nguyen Thanh Hung, Nguyen Thi Hoang Oanh, Nguyen Thanh Vu. Comparative Analysis of Human Resource Development Strategy of Family Universities and Corporate Universities in Vietnam. International journal of academic research and development. 2020; 5(4):26-30.
  48. Rewel Jiminez Santural Jose, Le Doan Minh Duc, Bui Xuan Bien, Tran Minh Thuong, Nguyen Thanh Vu. Comparative Analysis of the Business Strategy of Bach Hoa Xanh and VinMart on Vietnam's Retail Market. "International journal of academic research and development. 2020; 5(4):1-6.
  49. Szpringer W. E-COMMERCE - COMPETITION OR REGULATION? Difin Publisher, Warsaw. 2010.
  50. To Ngoc Minh Phuong, Nguyen Minh Ngoc, Dinh Ba Hung Anh, Nguyen Diu Huong, Nguyen Thi Thanh Huong. Green marketing development strategy in post Covid-19 period in Vietnam. International journal of multidisciplinary research and growth evaluation. 2021; 1(5):101-106.
  51. Truong Thi Hai Thuan. Analysis of Strategic Risk of Domestic and Foreign Real Estate Enterprises Operating in Vietnam's Market. International journal of commerce and management research. 2019; 5(5):36-43.
  52. Tien NH. Leadership in Socially Responsible Enterprises. Ementon Publisher, Warsaw, Poland, 2015.
  53. Tien NH. International economics, business and management strategy. Academic Publications, Dehli, 2019a, <http://www.publishbookonline.com/download/13/1-1-18-179.pdf>
  54. Tien NH, Anh DBH, Thuc TD. Global supply chain and logistics management. Academic Publications, Dehli, 2019a, <http://www.publishbookonline.com/download/10/1-1-17-419.pdf>
  55. Tien NH. Competitiveness of vietnam's economy. modeling analysis. PTM Publisher. Warsaw, 2013.
  56. Tien NH. Competitiveness of enterprises in a knowledge based economy. PTM Publisher. Warsaw, 2012.
  57. Tien NH, Nhi DTY, Chi DTP. CRM Application in Agricultural Management in the Mekong Delta. International journal of multidisciplinary research and development. 2019b; 6(10):123-126. <http://www.allsubjectjournal.com/archives/2019/vol6/issue10>
  58. Tien NH. CRM Application in Managing Hotel, Restaurant and Tourism Services in Vietnam. International journal of research in management. 2019b; 1(1):14-17. ISSN: 2664-8806. <http://www.managementpaper.net/article/view/4/1-1-14>
  59. Tien NH.. CRM Application in Customer Service Management at Big4 Banks in Vietnam. International journal of research in management. 2019c; 1(1):9-13. ISSN: 2664-8806. <http://www.managementpaper.net/article/view/3/1-1-13>
  60. Tien NH. Application of CRM in Agricultural Management. Proceedings of National Scientific Conference on: "Development of High-tech Agriculture in the Highlands in the Context of Regional Linkage and International Integration", 216-223. April 2019, Institute of Social Science in Central Region, Vietnam Academy of Social Science, 2019d, ISBN: 978-604-956-652-3
  61. Tien NH, Nhi DTY. Comparative Analysis of Knowledge Management Software Application at E&Y and Unilever Vietnam. International journal of multidisciplinary research and development. 2019; 6(10):22-27. <http://www.allsubjectjournal.com/archives/2019/vol6/issue10>
  62. Tien NH, Vinh NDT. Analyzing the Prospects and Limitations of the ERP Market in Vietnam. "International journal of commerce and management research. 2019a; 5, No. 5, 46-50. <http://www.managejournal.com/download/899/5-4-45-619.pdf>
  63. Tien NH, Vinh NDT. Analyzing the Prospects and Limitations of the ERP Market in the World. International journal of commerce and management research. 2019b; 5(5):42-45. <http://www.managejournal.com/download/898/5-4-44-988.pdf>
  64. Tien NH, Vinh NDT. ERP Application in SMEs in Vietnam - Limitations, Potentials and Development Solutions. International journal of commerce and management research. 2019c; 5(5):75-78. <http://www.managejournal.com/download/905/5-4-46-182.pdf>
  65. Tien NH. Organizational Changes Problems in the ERP Systems Implementation. „Organization and Management” No. (130) 4/2007, 51-64. Warsaw Institute of Organization and Management in Industry, 2007.
  66. Tien NH, Grzeszczyk TA. Change Management in ERP Systems. „Economics and Organization of Enterprise”, No. (673) 02/2006, 61-69. Warsaw Institute of Organization and Management in Industry, 2006.
  67. Tien NH. The E-government Investment in Vietnam in the Period 2000-2005. "Economic Science", No. 34/2006, 339-350. VIII Symposium at Economics and Management Institute. Swietokrzyska (Hollycross) University of Technology, Kielce, Poland, 2006.
  68. Wackowski K, Tien NH. The Systemic Character of Change Management Processes in ERP Class Systems Implementation. "Economic Science", No. 34/2006, 329-338. VIII Symposium at Economics and Management Institute. Swietokrzyska (Hollycross) University of Technology, Kielce, Poland, 2006.